Work Order ID 120979

June-16-14 1:15:05 PM

120979

Item ID: D4435-041 **Accept** *N9000040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Bracket Assembly

Start Date: 6/16/14 **Start Qty:** 8.00 *8* **Cust Item ID:**

Required Date: 6/16/14 **Req'd Qty:** 8.00 *8* **Customer:**

Reference:

Run Start *NR1*

Approvals: **Process Plan:** MLJ **Date:** 14-06-17 **Tooling:** _____ **Date:** _____ **Stop** *NR2*

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr / **Revision Nbr**									
D4435 / B									
100	FLOW WATER JET	0.00							
100 Waterjet	**Memo**	0.00				10		mm	14/07/17
FLOW CNC Waterjet	1-Cut D4435-1 as per Dwg Dwg Rev: D Prog Rev: D 2-Deburr if necessary								
110	QC2- Inspect parts off machine FAI/FAIB	0.00							
110 QC	**Memo**	0.00				10		mm	14/07/17
Quality Control									
120	QC8- Inspect parts - second check	0.00							
120 QC	**Memo**	0.00 14/7/17				10			
Quality Control									

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function
☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

Item ID: D4435-041 **Accept** *N900040100* **Setup Start** *NS1*
Revision ID: **Stop** *NS2*
Item Name: Bracket Assembly

Start Date: 6/16/14 **Start Qty:** 8.00 *8*
Required Date: 6/16/14 **Req'd Qty:** 8.00 *8*
Reference:

Cust Item ID:
Customer:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*
Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1	0.00				(10)	0	DGL	4-7-21
	Memo	0.00							
135 *135* QC Quality Control	QC7-Inspect Chemical Conversion Coat	0.00							DAS 34 9-89
	Memo	0.00							
140 *140* Powdercoat Powder Coating	Black Sandtex(Ref:4.3.5.7) per QSI005 4.3 MD7892	0.00				10	0	4-7-22	DAS 34 9-89
	Memo START TIME: 1035 OVEN TEMPERATURE: 320 FINISH TIME: 1105	0.00							

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

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☐ Contamination
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☐ Drawing
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☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

Item ID: D4435-041 **Accept** *N900040100* **Setup Start** *NS1*
Revision ID: **Stop** *NS2*
Item Name: Bracket Assembly

Start Date: 6/16/14 **Start Qty:** 8.00 *8*
Required Date: 6/16/14 **Req'd Qty:** 8.00 *8*
Reference:

Cust Item ID:
Customer:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*
Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp	DAS 36 9-89
150	QC3- Inspect Part Finish	0.00				10x			14/07/23	
150										
QC	**Memo**	0.00								
Quality Control										
160		0.00							FF	
160						10			14-07-23	
Small Fab	**Memo**	0.00								
Small Fab	1- Cut rubber seal at 3.50" 2-Glue rubber seal to bracket as per dwg (SHEET 1, NOTE 8) M128871									
170	QC5- Inspect part completeness to step on W/O	0.00							SB	
170						10			14/07/23	
QC	**Memo**	0.00								
Quality Control										

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐ ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

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☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function

☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence

☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge

☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled

☐ Other

Item ID: D4435-041 **Accept** *N900040100* **Setup Start** *NS1*
Revision ID: **Stop** *NS2*
Item Name: Bracket Assembly
Start Date: 6/16/14 **Start Qty:** 8.00 *8* **Cust Item ID:**
Required Date: 6/16/14 **Req'd Qty:** 8.00 *8* **Customer:**
Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____ **Run Start** *NR1*
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____ **Stop** *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	Identify as per dwg & Stock Location: ST	0.00			DAS 30 9-89	~~10~~			14/07/23
190 Packaging	**Memo**	0.00							
Packaging									
200	QC21- Final Inspection - Work Order Release	0.00							
200 QC	**Memo**	0.00				MLJ 14-07-24			
Quality Control									

14-7-23

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

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☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

Picklist Print

June-16-14 1:15:04 PM

1

Work Order ID: 120979 *120979*

Parent Item: D4435-041 *D4435-041*

Parent Item Name: Bracket Assembly

Start Date: 6/16/14 **Required Date:** 6/16/14

Start Qty: 8.00 **Required Qty:** 8.00

Comments: IPP REV:A 11.10.05 NEW ISSUE DD VERF:EC IPP
REV:B 12.03.06 AS PER DWG REV.B DD VERF:EC

Component Item ID / Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4441-1		Manufactured	No			160	f	52.3300	0.2916	3			
D4441-1									**				
Rubber Seal													

Location	Loc Qty	Loc Code
ST407	52.33	
86185	52.33	

3

FF 14-07-23

M6061T6S.040		Purchased	No			100	sf	234.5200	0.043	1			
M6061T6S.040									**				
6061-T6 .040 Sheet													

Location	Loc Qty	Loc Code
MAT021	234.52	
m126350	19.52	
m126981	76.91	
m128422	49.79	
m129165	88.3	
m129584		

05

mm 14/07/17

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

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☐ Folio/Program
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☐ Hardware
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☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

DART AEROSPACE LTD	Work Order:	120979
Description: Bracket	Part Number:	D4435-1
Inspection Dwg: D4435 **Rev:** B		Page 1 of 1

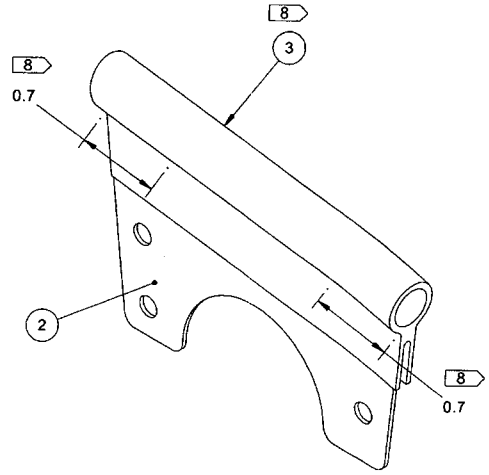
FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.204	+0.005/-0.001	0.206	✓		V-Stm-01	
0.30	+/-0.030	0.30	✓			
0.696	+/-0.010	0.696	✓			
1.88	+/-0.030	1.88	✓			
0.27	+/-0.030	0.27	✓			
0.68	+/-0.030	0.68	✓			
2.34	+/-0.030	2.34	✓			
3.06	+/-0.030	3.06	✓			
3.22	+/-0.030	3.22	✓			
0.200	+/-0.010	0.200	✓			
1.39	+/-0.030	1.39	✓			
2.548	+/-0.010	2.548	✓			
0.040	+/-0.010	0.041	✓			

Measured by:	mm	Audited by:	LMS 27 9-09	Preliminary Approval:	
Date:	14/07/17	Date:	14/7/17	Date:	

Rev	Date	Change	Revised by	Approved
A	12.02.01	New Issue	KJ	
B	12.05.22	Dimensions updated per Dwg Rev B	KJ	

ITEM	QTY -041	PART NUMBER	DESCRIPTION
1	X	**D4435-041**	**BRACKET ASSEMBLY**
2	1	D4435-1	BRACKET
3	1	D4441-1-035	RUBBER SEAL
4	A/R	3M 1300/1300L	ADHESIVE



D4435-041 BRACKET ASSEMBLY

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 120979 MJ
1406-17

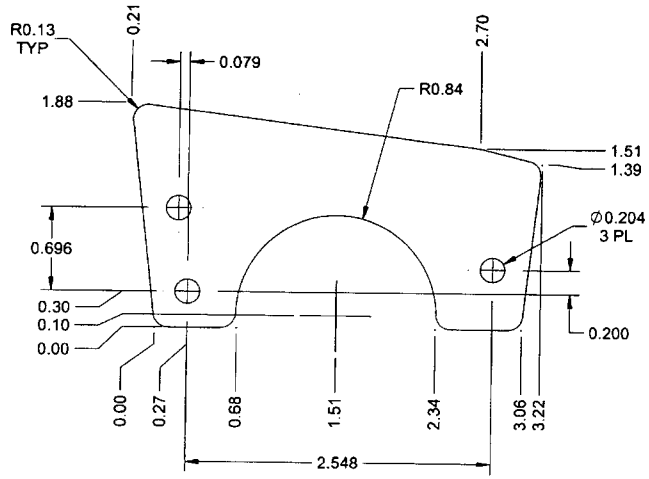
RELEASED
2012 -03- 02

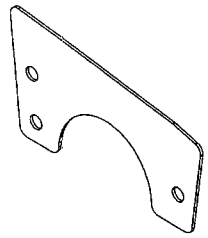
NOTES:
1) MATERIAL: N/A
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: 0.04 lbs
8) GLUE RUBBER SEAL TO BRACKET EDGE USING 3M 1300/1300L ADHESIVE, EXCEPT 0.7" FROM EACH END. ENSURE BRACKET IS COMPLETELY INSERTED INTO GROOVE OF RUBBER SEAL

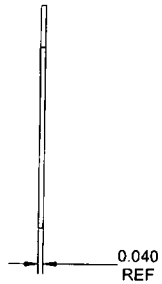
REV.	DESCRIPTION	BY	DATE
B	ADD A HOLE TO D4435-9F (ZN C7-11)	RF	12.01.27
A	NEW ISSUE	RF	12.01.17

DESIGN	RF	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
DRAWN	RF	
CHECKED		DRAWING NO. D4435 REV. B
MFG. APPR.		SHEET 1 OF 11
APPROVED		TITLE BRACKET SCALE NTS
DE APPR.		
DATE	12.01.27	

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D4435-1 BRACKET

RELEASED
2012 -03- 02

NOTES:
1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET 0.040 THICK
PER QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR AMS 4027
OR ASTM B209
REF DART SPEC. M6061T6S.040
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT "BLACK SANDTEX" (4.3.5.7) PER DART QSI 005 4.3
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: 0.02 lbs

DESIGN	RF	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
DRAWN	RF	
CHECKED		DRAWING NO. D4435 REV. B
MFG. APPR.		SHEET 4 OF 11
APPROVED		TITLE BRACKET SCALE NTS
DE APPR.		
DATE	12.01.27	

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